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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,857	10/30/2003	Jeffrey G. Reh	TI-29015.1	8101
23494	7590	10/17/2006	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			HUBER, PAUL W	
			ART UNIT	PAPER NUMBER
			2627	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/696,857	REH ET AL.	
	Examiner	Art Unit	
	Paul Huber	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application
- 6) Other: ____.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 9, 10, 14, 15, 18, 19, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuyuguchi et al. (USP-5,425,014).

Regarding claims 1-5, 9, 18 & 19, Tsuyuguchi et al. discloses a mass memory storage device and a method of reading data stored on a mass memory storage medium 12, the mass memory storage device comprising: a support arrangement (e.g., spindle motor 16) configured to support the mass memory storage medium 12 which stores data at a substantially uniform density (i.e., CLV disk; see col. 2, lines 56-62); a drive arrangement 18 operatively connected to the support arrangement 16 such that the drive arrangement 18 rotates the mass memory storage medium 12 at a substantially constant rotational speed when the mass memory storage device is operated in its intended way (see col. 2, line 66, through col. 3, line 12); a read head 20 for reading the data stored on the mass memory storage medium 12, the read head 20 being positioned adjacent to the stored data on the medium 12 and the read head 20 being movable relative to the medium (by positioning means 22) such that when the mass memory storage medium 12 is rotated at the constant speed, the data is read at a variable rate (see col. 2, lines 66-68, and abstract, lines 8-12); and a read channel arrangement 28 for processing the data read by the read head 20, the read channel arrangement 28 having a substantially continuously variable read channel data processing rate (by clock 44) which varies according to the rate at which the read head 20 reads the data from the mass memory storage medium 12.

Regarding claims 10, 22 and 23, Tsuyuguchi et al. teaches that the "invention could be applied to the reading of magnetic CLV disks" (col. 6, lines 35-36), thereby inherently requiring the read head to be a magnetic read head.

Regarding claims 14 & 15, the mass memory storage device disclosed by Tsuyuguchi et al. inherently includes a housing that receives and supports the mass memory storage medium 12 as claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-8, 11-13, 16, 17, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuyuguchi et al., as applied to the claims above, in further view of Official Notice.

Tsuyuguchi et al. discloses the invention as claimed, including the limitation that the "invention could be applied to the reading of magnetic CLV disks" (col. 6, lines 35-36), but fails to specifically teach that the device is either hard disk drive or a floppy disk drive. However, it is manifestly well known in the art at the time the invention was made that hard disk drives and floppy disk drives for the purpose of storage of information for use in a computer, and Official Notice is hereby taken. See *In re Fox*, 471 F.2d 1405, 1407, 176 USPQ 340, 341 (CCPA 1973).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Tsuyuguchi et al. such that the magnetic mass memory storage device is either a hard disk drive or a floppy disk drive, as well known in the art. A practitioner in the art would have been motivated to do this for the purpose of storage of information for use in a computer.

Claims 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshimaru (USP-4,984,227).

Yoshimaru discloses a method of storing data on a mass memory storage medium having a substantially uniform data storage density. See figure 1, col. 2, lines 34-39, and abstract. A mass memory storage medium 1 is supported by motor 3 for rotation. The medium 1 is rotated at a substantially constant speed by driver 17. See col. 1,

Art Unit: 2627

lines 66-67. Using a write head 12, data is stored to the medium 1 by positioning the write head 12 adjacent to a desired portion of the medium 1 while the medium is rotated at the constant speed and moving the write head 12 relative to the medium 1 as the data is stored. Then, using a write head controller (elements 22, 23 & 15) having a continuously variable data storing rate, the data is stored on the medium 1 by varying the data storing rate according to the position of the write head 12 such that the data is stored at a substantially uniform density. See col. 1, lines 61-68, and abstract.

Any inquiry concerning this communication should be directed to Paul Huber at telephone number 571-272-7588.



Paul Huber
Primary Examiner
Art Unit 2627

pwh
October 13, 2006